Questions and Answers About the Reveille Herd Management Area

Description of the Environment

The Reveille HMA is located 50 miles east of Tonopah and 12 miles south of Warm Springs, Nevada, in Nye County. The area consists of 105,494 acres and encompasses an area 17 miles wide and 10 miles long. The Proposed Gather Area encompasses the Reveille Allotment which exceeds 600,000 acres in size. This area is typical of the Great Basin region characterized by north-south trending mountain ranges. Significant features are large flat valley bottoms and steep mountains with elevations ranging from 5,000 feet in the Reveille Valley to over 9,400 feet on Kawich Mountain. The area is remote and rugged, with portions of four Wilderness Study Areas (WSAs) included within the proposed gather area, and portions of two WSAs within the Reveille HMA itself. The vegetation consists primarily of salt desert shrub, black sagebrush, and pinyon-juniper woodlands. Noteworthy species include Indian ricegrass, needle-and-thread grass, galleta grass, bottlebrush squirreltail, winterfat (white sage), fourwing saltbush, shadscale, and bud sagebrush.



Helicopter inventory -- Reveille HMA, August 2009

The area falls within the Great Basin Desert which encompasses much of Nevada, western Utah, portions of southern Oregon and small parts of Idaho and California. The weather and precipitation patterns vary considerably within Central Nevada. The orographic features of the region play a very important role in the unequal distribution of precipitation. Central Nevada is very arid. The Reveille area receives 5 inches of annual precipitation in the valley bottoms. The mountain tops can receive as much as 16 inches. The average precipitation received at the Reveille Rain gauge since 1985 is 5.2 inches annually. Summers are hot and dry, with high temperatures in the 90's or higher. Winters are cold, with temperatures dropping below freezing and below zero degrees. The Reveille HMA receives snow during the winter which may range from several inches to nearly a foot in depth depending upon the severity of the winter, and elevation. As a comparison, Texas, Nebraska, Kentucky and Northern California all receive 15-30 inches or more annually, which is 3-6 times more precipitation than the lower elevations of the Reveille HMA.

Why is the BLM gathering the Reveille HMA herd?

The gather is needed to achieve and maintain the Appropriate Management Level (AML) of wild horses in the Reveille HMA and prevent further deterioration resulting from the current overpopulation within the HMA and within the Reveille Allotment, outside of HMA boundaries. The current wild horse population for the HMA is approximately 168, which exceeds the established AML of 138 by 30 animals. After the foaling season in 2015, the population may grow to an estimated 202 wild horses. The AML of 138 wild horses was determined to be the maximum level that would provide for a thriving natural ecological balance between the wild horse population, wildlife, livestock and vegetation, and which would protect the range from the deterioration associated with an overpopulation of wild horses.

The Reveille HMA AML and HMA boundary was originally established through an amended judgment of the District Court in Fallini v. Hodel CV-R-85-535-BRT (D. Nev. Nov. 13, 1987). These provisions were carried forward into the most recent adjustment of the AML (to 138 wild horses) in the *Amended Wild Horse Management Final Multiple Use Decision for the Reveille Allotment*, October 5, 2001. The provisions were ordered and clarified through the Internal Board of Land Appeals Orders 2001-327 and 2002-60 issued August 2001 and January 2002 respectively. These documents require that annual inventory of the Reveille Allotment take place and when it is determined that the AML of 138 wild horses is exceeded, a gather must be initiated within 120 days to remove excess wild horses, beginning with those that exist outside of the HMA boundaries.

What is the Proposed Action and other alternatives considered in the Preliminary Environmental Assessment (EA)?

Proposed Action: Remove excess wild horses to a post gather population of 100 wild horses, apply fertility control to released mares and adjust the sex ratio to 60% males and 40% females within the Reveille HMA. Any wild horses residing outside the HMA boundaries would be removed as a priority before gathering horses within the HMA.



Release of wild horses back to the range. Rocky Hills HMA – January 2009

Alternatives Considered but Dismissed from Detailed Analysis

Through completion of EAs for proposed wild horse gathers in Nevada in 2009 and 2010, several alternatives were proposed by the interested public. Some of the more pertinent ones are

discussed below. No other Alternatives were received during the scoping period for the Proposed Reveille Wild Horse Gather.

Gathering the HMA to AML

A post-gather population size at the AML (138 animals) would result in the AML being exceeded following the foaling season in 2015. The BLM would not be in compliance with the 1987 Stipulated Settlement or IBLA Orders 2001-327 or 2002-60. This Alternative was put through the WinEquus Population model to simulate potential outcomes. The average population sizes in 11 years ranges from 189-219, which exceeds both the current AML and the number of animals specified within the 1987 stipulated settlement (145-165).

The 2001 Reveille Allotment FMUD states: "It has been determined that a thriving natural ecological balance can be obtained through an AML of 138 wild horses (maximum), or 1,661 AUMs for the Reveille Herd Management Area", and provides for gathers to remove wild horses below the AML to allow for a three year gather frequency.

"We interpret the term AML within the context of the statute to mean that 'optimum' number of wild horses which results in a thriving natural ecological balance and avoids a deterioration of the range" (109 IBLA 119 API 1989). "Proper range management dictates removal of horses before the herd size causes damage to the range land (emphasis added). Thus, the optimum number of horses is somewhere below the number that would cause resource damage" (118 IBLA 75).

Removing excess wild horses to achieve a post gather population figure of 138 animals would result in the need to conduct another gather to remove additional excess animals within 1-2 years in order to be in conformance with the stipulated settlement and to avoid allowing the population to exceed the established AML. Progress would not be made towards attainment of Rangeland Health Standards or Land Use Plan/Allotment Specific Objectives. This Alternative would not meet the Purpose and Need and did not receive further consideration.

Control the excess wild horses with only the use of fertility control treatment

An alternative to gather a significant portion of the existing population (90%) and implement fertility control treatments only, without removal of excess horses was modeled using a two-year and three-year gather/treatment interval over a 10 year period. Based on WinEquus population modeling, this alternative would not result in attainment of the AML for the HMA and the wild horse population would continue to have an average population growth rate of 2.8-11.1% adding to the current wild horse overpopulation, albeit at a slower rate of growth. Population modeling reflected an average population size in 11 years of 285-442 wild horses under a two year treatment interval. This alternative would not decrease the existing overpopulation of wild horses, resource concerns would continue, and implementation would result in significantly increased gather and fertility control costs. This alternative would not be in conformance with the 1987 Stipulated Settlement or 2001/2002 IBLA Orders as the population would continue to exceed the current AML. Progress would not be made towards attainment of Rangeland Health Standards or Land Use Plan/Allotment Specific Objectives. This alternative would not meet the Purpose and Need and did not receive any further consideration.

Use of Bait and/or Water Trapping

An alternative considered was to accomplish the removal of excess wild horses through the use of bait and/or water trapping as the primary gather method. Water trapping involves the construction of gather corrals, and baiting wild horses into the corrals with the use of water. Specialized one-way gates are often used to prevent the animals from leaving the corral once inside. Bait and water trapping methods are usually only effective in areas where water is limited or absent, resulting in high motivation for wild horses to enter the trap to access them. All other water sources except the water trap source must be fenced off from the horses (and other range users).

This alternative was dismissed from detailed study for the following reasons: (1) the size of the area is too large to use this method; and (2) the presence of water sources on both private and public lands inside and outside the HMA boundary would make it almost impossible to restrict wild horse access to the extent needed to effectively gather and remove the excess animal and (3) water rights within the HMA are primarily held by the grazing permittee.

The large geographic area involved and the extended time necessary for this alternative would result in a significant increase in gather cost and would make it difficult to limit the gather to a reasonable time. The extended gather time, (which could be 1-2 months) would either cause all removed animals to be held for an extended time until the gather was completed in order to administer fertility control and adjust sex ratios, or it would preclude the use of these population control measures, and preclude any option to selectively remove and release animals for preferred age structure or other desirable traits. Given the impracticalities of implementing this alternative for such a large geographic area, this alternative was eliminated from detailed study.

Remove or Reduce Livestock within the HMAs

This alternative would involve no removal of wild horses and instead address the excess wild horse numbers through the removal or reduction of livestock within the HMA. This alternative was not brought forward for analysis because it is inconsistent with the Tonopah RMP objectives, Reveille Allotment FMUD (2001) and is inconsistent with multiple use management. This alternative would also violate the 1987 Stipulated Settlement and IBLA orders 2001-327 and 2002-60.

The proposal to reduce livestock would not meet the Purpose and Need identified in Section 1.3 of the EA and is not consistent with the WFRHBA, which directs the Secretary to immediately remove excess wild horses. Analysis of census and monitoring data resulted in the determination that limited forage resources within the HMA were leading to wild horses moving outside of HMA boundaries, and in 2001 the Reveille Allotment FMUD adjusted the AML to balance the forage availability with the population size, and reduce the number of wild horses leaving the HMA. Under this alternative, wild horses would continue to exist outside of HMA boundaries in areas that are not designated for their use.

Livestock grazing can only be reduced or eliminated following the process outlined in the regulations at 43 CFR § 4100. Such changes cannot be made through a wild horse gather decision. Changes in forage allocations between livestock and wild horses would have to be reevaluated and implemented through the appropriate decision-making processes to determine

whether a thriving natural ecological balance can be achieved at a higher AML and in order to modify the current multiple use relationship established in the RMPs.

The allocation of livestock AUMs within the 1997 Tonopah RMP is 25,730 AUMs within the 650,000 acre allotment. The Reveille Allotment has been evaluated for Rangeland Health. These processes were completed with public involvement and resulted in data interpretation, and carrying capacity analysis, which determined the number of AUMs to be allocated to wild horses and livestock. These management actions, including determination of wild horse AML, were finalized in the FMUD following public comment.

The carrying capacity analysis for the Reveille Allotment Evaluation determined that the desired stocking level for livestock within the HMA boundary was 2,210 AUMs or 184 head of cattle.

The carrying capacity analysis for livestock was based on use pattern mapping and actual use by wild horses within the HMA, as well as the estimated actual use for cattle using the preference allotted to each of seven base waters used by the permittee within the HMA. The remaining AUMs are allocated to cattle use outside of the HMA.

The current level of wild horses within the Reveille Allotment already exceeds the AUMs allocated to wild horses within the Reveille HMA.

The Settlement Agreement of 2006 set forth several terms and conditions for livestock grazing management to make progress towards achieving the Standards for Rangeland Health. These terms and conditions pertained to management of the livestock for each Base Water Service Area (BWSA) which included monitoring of the seed ripe time desired utilization levels during the mid-year and/or end of year period to determine if the standards were met or exceeded. Other requirements consisted of annually filing actual use reports, and grazing plans for the allotment. Other provisions of the Settlement pertained to rangeland improvement projects.

While the BLM is authorized to remove livestock from HMAs "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury" (43 CFR § 4710.5), this authority is usually applied in cases of emergency and not for general management of wild horses or burros.

For these reasons, this alternative was dropped from detailed analysis and this Gather Plan and EA would not involve reductions of permitted livestock or increases of the established AMLs. Allocations to livestock or wild horses would be re-evaluated in future years and implemented through appropriate decision and environmental analysis documents.

Alternative capture techniques instead of helicopter capture of excess wild horses

Within Nevada, scoping and issuance of Gather Plan EAs for wild horse gathers has resulted in comments from the public requesting the BLM capture wild horses through alternative methods. The following is a summary of some of those methods with information about their use.

- Net gunning techniques normally used to capture big game animals also rely on helicopters. These methods can be safe and effective on a small scale with optimum ground conditions and access. The use of this method is not practical on a large scale and can result in additional injury to animals, humans and impacts due to the need for cross country off-road travel to access netted animals.
- Chemical immobilization is a very specialized technique and strictly regulated. Currently the BLM does not have sufficient expertise to implement this method and it would be impractical to use given the size of the HMA, access limitations and approachability of the horses.
- Use of wrangler on horseback drive-trapping to remove excess wild horses can be fairly effective on a small scale but due to number of excess horses to be removed, the large geographic size of the HMA, and approachability of the horses this technique would be ineffective and impractical.
- Horseback drive-trapping is also very labor intensive and can be very harmful to the domestic horses used to herd the wild horses and dangerous to humans. For these reasons, this method was eliminated from further consideration.



Reveille HMA, August 2009